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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,888	03/08/2007	George Telfer	17172/031001	4451

26722 7590 07/21/2008  
OSHA LIANG/MI  
ONE HOUSTON CENTER  
SUITE 2800  
HOUSTON, TX 77010

EXAMINER
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FULLER, ROBERT EDWARD

ART UNIT	PAPER NUMBER
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3676

NOTIFICATION DATE	DELIVERY MODE
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07/21/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/552,888	<b>Applicant(s)</b> TELFER, GEORGE	
	<b>Examiner</b> ROBERT E. FULLER	<b>Art Unit</b> 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 9-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 9-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's submission, filed June 12, 2008, has been fully considered.

Examiner understands that applicant merely added allowable subject matter into the independent claims and added new independent claims which contain allowable subject matter. However, based on the discovery of new prior art, examiner has withdrawn the allowability of those claims and has set forth new prior art rejections. Therefore, this office action has not been made final. Note that examiner has added a drawing objection, a claim objection, and a rejection under 35 U.S.C. 112, 2<sup>nd</sup> paragraph.

#### ***Drawings***

2. The drawings are objected to because the section identification "B-B" in Figure 1 is improper. Section lines should be labeled using Roman or Arabic numerals. See 37 CFR 1.84 (h) (3). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or

"New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Objections***

4. Claims 3, 4, and 10-14 are objected to because of the following informalities: Since these claims are dependent claims, the first word of each of these claims should be changed from "A" to --The--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites "a first bore having retaining means and a second bore passing therethrough." This is unclear, since the language seems to indicate that the second bore passes through the retaining means, which contradicts the drawings and specification. The drawings show that the first and second bores both pass through the main bore of the ball catcher. Examiner is examining claim 9 as if the second bore

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passes through the retaining means. However, appropriate correction is required so that the claim is clearly consistent with the specification and drawings.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 3, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Collins (US 6,336,507).

With regard to claim 1, Collins discloses a ball catcher for selectively retaining drop balls in a tool string, the ball catcher comprising a substantially cylindrical body (20) having a main bore (22) running axially therethrough, at least a portion of the main bore being restrained to a first (25) and a second (24) bore running axially therethrough, the first and second bores being parallel and wherein the first bore includes restriction means (28) at an end thereof, wherein the first and second bores are partially overlapping to provide a channel therebetween (see Figure 10b).

With regard to claim 3, the main bore is located centrally on the body.

With regard to claim 4, the entry port is considered to be the horizontal plane cut by section line "10b" in figure 9. Therefore, the entry port has a first aperture equal to the diameter of the first bore and a second aperture having a diameter less than the diameter of the first bore, the apertures being aligned with the first and second bores respectively.

9. Claims 9, 12, and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Vincent et al. (US 2004/0040719).

With regard to claim 9, Vincent discloses a method of selectively retaining drop balls in a tool string, comprising the steps: (a) inserting in a tool string a ball catcher (10) including a first bore (28) having retaining means and a second bore (18) passing therethrough, the bores including an overlapping portion to provide a channel therebetween (there is axial overlap between bore 28 and bore 18, which creates a channel for communication between the two bores); (b) dropping a first ball (PP—which is shown as a plug but can be a ball—see the first line of paragraph 0018) of a first diameter through the tool string; (c) directing the first ball into the first bore; and (d) retaining the first ball in the first bore (see Figure 2).

With regard to claim 12, Vincent teaches that his method allows "passage of fluid and equipment beyond the plug capture tool to a deeper location in the well bore."

With regard to claim 15, Vincent discloses a ball catcher for selectively retaining drop balls in a tool string, the ball catcher comprising a substantially cylindrical body (12) having a main bore running axially therethrough, at least a portion of the main bore being restrained to a first (i.e. the area outside of the tube 28) and a second bore (28)

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running axially therethrough, the first and second bores being parallel and wherein the first bore includes restriction means (20) at an end thereof, wherein the portion of the main bore includes an entry port (the entry port comprises baffle 30 and the area at the top of the tube 28), the entry port having a first aperture equal to the diameter of the first bore (the first aperture consists of the area outside of the tube 28 within the horizontal plane at the top of the tube 28) and a second aperture (the second aperture is the area inside the tube 28 within the horizontal plane at the top of tub 28) having a diameter less than the diameter of the first bore, the apertures being aligned with the first and second bores respectively, and wherein the entry port is inclined with respect to the main bore (because baffle 30 is part of the entry port and it is inclined—see Figures 3 and 4).

With regard to claim 16, this claim is rejected exactly as stated above with respect to claim 15, since examiner is treating claim 16 as if it does not contain the limitation directed to the channel.

With regard to claim 17, this claim is rejected in the same way as claim 15 above, and the third bore is except that the first bore is tube 28, and the second bore is the area around tube 28. Therefore, the third bore (18) is coaxially aligned with the first bore and has a diameter less than the first bore.

With regard to claim 18, this claim is rejected in the same way as claim 17 above, so that the second bore (the area around tube 28) is located centrally on the body.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vincent et al. in view of Stokley et al. (US 4,893,678).

Vincent fails to explicitly disclose actuating a tool above the ball catcher with the first pump-down ball. However, Vincent does state that the pump down ball can come from "any kind of equipment which might release a pumpdown plug or ball into the tool" (see paragraph 0018).

Stokley discloses a packer which is actuated by a ball (52), which falls through the tool after actuation of the packer.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have actuated a tool above the ball catcher of Vincent with the first pump-down ball of Vincent, since Vincent's ball can come from any tool



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that can release a ball, and Stokley shows that it is known to actuate tools with pump-down balls and subsequently release them from the actuated tool to a lower point within the tool string.

***Allowable Subject Matter***

12. Claims 10, 11, and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT E. FULLER whose telephone number is (571)272-0419. The examiner can normally be reached on Monday thru Friday from 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer H Gay/  
Supervisory Patent Examiner, Art  
Unit 3676

07/16/2008  
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